

Appl. No. 10/777,204
Amdt. Dated January 20, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) Use of a hollow Polymethyl pentene textile fibre as a medium for supplying oxygen to a biofilm.
2. (Currently Amended) A process comprising the steps of Wweaving of hollow PMP fibres in into a fabric and using the fabric to provide support for biofilm growth
3. (Currently Amended) A process for transferring air to microorganism growing in wastewater comprising the steps of Ppotting of a bundle of thea fabric modulemade of hollow PMP fibers into a modules and using the module to supply and remove air to microorganisms growing in a wastewater while keeping the air and the wastewater separate.
4. (New) An apparatus for supporting a biofilm in a liquid comprising:
 - a) a plurality of gas permeable hollow fibers, each hollow fiber having a lumen, an outer surface and an open end; and,
 - b) a header, the header having a cavity and a port open to the cavity, wherein the hollow fibers extend from the header, with the outer surfaces of the open ends of the hollow fibers sealed to the header and the lumens of the hollow fibers communicating with the port through the cavity and wherein the fibers are made of polymethyl pentene.
5. (New) The apparatus of claim 4 wherein the fibers have dense walls.
6. (New) The apparatus of claim 4 wherein the hollow fibers have an outside diameter of 50 microns or less.

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7. (New) The apparatus of claim 4 wherein the hollow fibers are between 1 metre and 5 metres long.
8. (New) The apparatus of claim 4 wherein the hollow fibers extend along their length generally in a first direction and further comprising second fibers extending along their length generally in a second direction, the second direction being perpendicular to the first direction.
9. (New) The apparatus of claim 8 wherein the hollow fibers and second fibers form a fabric.
10. (New) The apparatus of claim 9 wherein the fabric is generally continuous across the length of the hollow fibers.
11. (New) The apparatus of claim 4 wherein the hollow fibers have second open ends.
12. (New) The apparatus of claim 11 wherein the second open ends of the hollow fibers are potted in a second header.
13. (New) The apparatus of claim 12 wherein the second open ends communicate with a second port of the second header through a second cavity of the second header.
14. (New) The apparatus of claim 13 wherein the header and the second header are spaced apart from each other and the hollow fibers are arranged into one or more fabric sheets extending between the headers.
15. (New) The apparatus of claim 14 wherein the fabric sheets are generally parallel to each other.

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16. (New) The apparatus of claim 15 wherein adjacent fabric sheets have a spacing between them of between 3 mm and 15 mm.

17. (New) The apparatus of claim 16 further comprising spacers between the fabric sheets outside of the header.

18. (New) The apparatus of claim 14 wherein the fabric sheets are woven.

19. (New) The apparatus of claim 14 having an oxygen transfer efficiency of 50 % or more.